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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/632,491

Filing Date: July 31, 2003

Appellant(s): SKIDMORE ET AL.

David Rodack
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 19 March 2007 appealing from the Office action
mailed 14 August 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct. See pages 2-8 of the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

Note that Claim 23 is rejected under alternative grounds.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,802,836	WHISSELL	2-1989
5,358,214	BATLLE	10-1994

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1,872,522	STUCKEY	8-1932
2,475,435	RASMUSSEN	7-1949
2,532,049	WITTKE	11-1950
3,509,250	KNIPPER	4-1970
3,662,438	KOYAMA	5-1972
6,113,379	LACROIX	9-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-5 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Batlle (USPN 5358214).

As to Claim 1, Whissell teaches the well known aspects of making masonry units, comprising:

- a) raising a pallet to a bottom surface of a mold (Figs. 5- 7)
- c) dispensing mix into the mold (Fig. 6)
- d) compressing the mix with a shoe (Figs. 6-7)
- e) responsive to the compressing, forming a masonry unit.

Whissell appears to be silent to:

- b) inserting a filler plug into the side of the mold between a partition plate and a pallet and c) a filler plug effect in the compressed mix whereby a masonry unit having a filler plug effect is provided.

However, Batlle teaches inserting a filler plug into the side of the mold between a partition plate and a pallet (Figs. 1-5) and a filler plug effect in the compressed mix whereby a filler plug effect is provided (Fig. 5 and 2:46-49).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Batlle into that of Whissell for the following reasons:

- a) Batlle teaches that stripping of the part from a mold causes serious problems since the adherence thereof to the mold itself and to the strips causes stresses to be formed in precastings, causing deterioration thereof, which Batlle's method resolves.
- b) Batlle suggests use in precastings, and Whissell's concrete blocks are considered to be precastings.

As to Claim 2, Batlle teaches removing the filler plug (3:40-45). **As to Claim 3**, Whissell strips by lowering the pallet, a step which is conventional and common in the art (Figs. 5-7). **As to Claim 4**, because Batlle's bevel sits on the bottom of the mold, it is obviously a bottom bevel in a compressed mix forming a masonry unit (Fig. 5 and 2:46-49). **As to Claim 5**, Batlle's bevel formed in the compressed mix could fulfill the intended use of being a mortar buffer surface, and therefore fulfills the claim limitation. **As to Claim 23**, Whissell and Batlle appear to be silent to the particular shapes and sizes sought in this dependent claim. However, these limitations appear to be drawn to the particular shape of the article sought and to the shape of the apparatus that makes the desired article. However, it is the Examiner's position that when the process steps are known from the prior art, the limitations relating to *size* or *shape* of the *article* produced or the *apparatus* used to perform the process would not patentably distinguish the claimed method. Additionally, Batlle teaches the claimed shape (Fig. 5).

Claims 7, 8, and 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Batlle (USPN 5358214), and further in view of LaCroix (USPN 6113379) and Stuckey (USPN 1872522). Whissell and Batlle teach the subject matter of Claim 1 under 35 USC 103(a) above.

As to Claim 7, Whissell and Batlle teach the bevel between the front surface and bottom surface (See Batlle's figures), but appear to be silent to the side gussets, and therefore to the forming of an angle of inclination between a front surface, and the top and sides. However, LaCroix teaches that such side gussets are known as a desired article shape (Fig. 7, for instance), and Stuckey teaches a "shoe" having an angular surface which would create a bevel between a front surface and a top surface (Figs. 1-5, 8-10). It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of LaCroix and Stuckey into that of Whissell and Batlle in order to provide easy cleavage planes and decorative beveled edges which would be pleasing to the eye. As to Claim 8, in the combined method, LaCroix teaches side gussets, and Stuckey also teaches side gussets, and in the combined method, Stuckey's "shoe" would provide an angular surface which compressed against the angular surface of the opposing side gussets. As to Claims 9-20, Batlle teaches a filler plug effect in the compressed mix (3:35-47). However, Whissell, Batlle, LaCroix, and Stuckey appear to be silent to the particular shapes and sizes sought in these dependent claims. However, these limitations appear to be drawn to the particular shape of the article sought and to the shape of the apparatus that makes the desired article. However, it is the Examiner's position that when the process steps are known from the prior art, the limitations relating to *size* or *shape* of the

article produced or the *apparatus* used to perform the process would not be sufficient to patentably distinguish the claimed method.

Claims 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Batlle (USPN 5358214), and further in view of LaCroix (USPN 6113379) and Stuckey (USPN 1872522), and further in view of Knipper (USPN 3509250), Rasmussen (USPN 2475435), and Wittke (USPN 2532049). Whissell, Batlle, LaCroix, and Stuckey teach the subject matter of Claim 8 above under 35 USC 103(a).

As to Claims 9-20, Battle teaches a filler plug effect in the compressed mix (3:35-47). However, in the alternative that the size or shape of the article or bevels must be given patentable weight, Knipper, Rasmussen, and Wittke teach and suggest to the ordinary artisan that the sizes and shapes of the bevels and shoe be modified. In particular, Knipper teaches a plug (Fig. 3, Items 56, 66) in which inserts having a desired configuration can be put into the mold, and members of different configurations can be cast merely by changing the inserts without changing the basic structure of the mold (1:50-72). Knipper additionally teaches that the molding method and apparatus are readily adjustable to the size of the desired molded members (2:5-10). Rasmussen additionally teaches channels having a dovetail shape, or concave (Fig. 4, Items 33 and 32, respectively). Wittke teaches "shoes" having angled surfaces (Figs. 2 and 4, Item 41). It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Knipper, Rasmussen, and Wittke into that of Whissell, Batlle, LaCroix, and Stuckey in order to provide adjustable size and configuration bevels, as well as aesthetically pleasing and structurally reinforcing channels, bevels, or recesses. In the

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combined method, it would have been *prima facie* obvious to vary the various configurations, sizes, or angles to arrive at the claimed invention.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Batlle (USPN 5358214), and further in view of Koyama (USPN 3662438). Whissell and Batlle teach the subject matter of Claim 1 above under 35 USC 103(a).

As to **Claim 22**, Whissell and Batlle appear to be silent to the simultaneous insertion. However, Batlle clearly suggests multiple elements, and Koyama inserts multiple elements to provide recesses simultaneously (Fig. 3 and elsewhere). It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Koyama into that of Whissell and Batlle in order to provide automated and rapid actuation at a high pressure.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Batlle (USPN 5358214), and further in view of Knipper (USPN 3509250), Rasmussen (USPN 2475435), and Wittke (USPN 2532049). Whissell and Batlle teach the subject matter of Claim 1 above under 35 USC 103(a).

As to **Claim 23**, in the alternative that the size or shape of the article or bevels must be given patentable weight, Knipper, Rasmussen, and Wittke teach and suggest to the ordinary artisan that the sizes and shapes of the bevels and shoe be modified. In particular, Knipper teaches a plug (Fig. 3, items 56, 66) in which inserts having a desired configuration can be put into the mold, and members of different configurations can be cast merely by changing the

inserts without changing the basic structure of the mold (1:50-72). Knipper additionally teaches that the molding method and apparatus are readily adjustable to the size of the desired molded members (2:5-10). Rasmussen additionally teaches channels having a dovetail shape, or concave (Fig. 4, Items 33 and 32, respectively). Wittke teaches "shoes" having angled surfaces (Figs. 2 and 4, Item 41). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Knipper, Rasmussen, and Wittke into that of Whissell, Batlle, LaCroix, and Stuckey in order to provide adjustable size and configuration bevels, as well as aesthetically pleasing and structurally reinforcing channels, bevels, or recesses. In the combined method, it would have been prima facie obvious to vary the various configurations, sizes, or angles to arrive at the claimed invention.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Batlle (USPN 5358214), LaCroix (USPN 6113379), Stuckey (USPN 1872522), and Koyama (USPN 3662438).

As to Claim 24, Whissell teaches the well known aspects of making masonry units, comprising:

- a) raising a pallet to a bottom surface of a mold (Figs. 5- 7)
- c) dispensing mix into the mold (Fig. 6)
- d) compressing the mix with a shoe (Figs. 6-7)
- e) responsive to the compressing, forming a plurality of masonry units.

Whissell appears to be silent to:

- a) a mold having gussets connected to internal surfaces of the mold

b) inserting a plurality of filler plugs substantially simultaneously into the side of the mold

between a partition plate and a pallet

c) the beveled edge surfaces

However, Batlle, LaCroix, and Stuckey teach the following aspects:

a) LaCroix teaches internal gussets (Fig. 7)

b) Batlle teaches inserting a filler plug into the side of the mold between a partition plate and a pallet (Figs. 1-5) to form beveled edges on the compressed mix corresponding to a masonry unit (3:35-47 and 2:46-49). Koyama teaches that it is known to do so substantially simultaneously (Fig. 3)

c) Stuckey teaches that by using beveled molds and a beveled shoe, it is possible to achieve a beveled-edge surface joining a front surface to a top surface, a bottom surface, and side surfaces. (Figs. 1-10)

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Batlle, LaCroix, Stuckey, and Koyama into that of Whissell for the following reasons:

a) Batlle teaches that stripping of the part from a mold causes serious problems since the adherence thereof to the mold itself and to the strips causes stresses to be formed in precastings, causing deterioration thereof, which Batlle's method resolves

b) the beveled edges of Stuckey and LaCroix would have been obviously desirable due their aesthetically pleasing appearance over sharp corners

c) Koyama's method would produce the obvious benefits of rapid and automated actuation.

(10) Response to Argument

Independent Claim 1, Dependent Claims 2-5 and 23

Appellant's arguments assert that the rejection improperly fails to enlist an as a whole analysis and has failed to show a proper motivation to combine Whissell and Batlle (6/28/07 Brief, pages 10-11). Appellants argue that the "as a whole" assessment must show that an artisan of ordinary skill confronted by the same problems as the inventor would have selected the various elements from the prior art and combined them in the claimed manner (Brief, pages 11 and 12). Appellants argue that the advisory action simply concludes that the rejection complies with the "as a whole requirement" and fails to properly refute/address the assertion that the "as a whole" inquiry has not been properly met. Appellants further argue (Brief, page 13) that Batlle fails to disclose a compression mold process or forming masonry units, and that a skilled artisan addressing the problems presented in molding blocks through compression will clearly be presented with different problems than those where compression is not used. Appellants further argue on page 13 that Batlle does not disclose masonry units. Appellants further argue on page 14 that even if Batlle addresses the problems associated with stripping (precastings) from a mold, and Whissell addresses precastings, that this is irrelevant to the combination because it doesn't show the problems confronted by the inventor. Appellants further argue on page 14 that hindsight reasoning has been used.

Response:

In reviewing the record, the Examiner notes that motivation for combining Batlle with Whissell was provided on page 3 of the Non-Final Rejection mailed 27 February 2006 and on

page 3 of the Final Rejection mailed 14 August 2006. Appellants do not appear to have addressed or particularly argued against this stated motivation, or argued that all claim limitations are not taught by the reference. Appellants' argument appears to be founded instead upon the premise that the rejection necessarily fails the "as a whole" inquiry because there is no showing that the prior art actually recognized and addressed the technological problem of the instant specification.

First, Appellants appear to characterize the technological problem to be solved as providing (a) a masonry unit with a filler plug effect, and (b) various bevels through a compression process (Brief, page 12, lines 17-20). It is the Examiner's position that one of ordinary skill in the art at the time of the invention having knowledge of the Whissell and Batlle processes, and facing the need of providing a masonry unit with a filler plug effect and various bevels would have found it obvious to combine these processes to provide both a filler plug effect and bevels in view of Batlle's teaching of both a filler plug and bevels. See Batlle, Figs. 1-3. Also see Figs. 5A, 7A, 10A, and 11A-11D of the instant application.

Second, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Here, it is submitted that one of ordinary skill would have been motivated to make the combination of Batlle with Whissell in order to resolve problems encountered in stripping parts from the mold, and it would follow that the filler plug effect and various bevels and filler plug effects would obviously result from the use of Batlle's dividers (Batlle, Fig. 5,

items 12, 16, 8), which bear a strong resemblance to those disclosed in the instant application. See the Specification, Fig. 10A, items 552 and 535.

Third, in response to Appellants' argument that Battle does not teach a compression molding process, it is submitted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Whissell provides a conventional compression molding process which forms articles which are interpreted to be masonry units using a compression process in which dividers are present (Whissell, Fig. 7, item 7). The proposed modification incorporates particular features of the Battle dividers into the Whissell process for the expected effect of improving the stripping of parts from the mold.

Fourth, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Dependent Claims 7, 8, 9-20

On pages 15-16, Appellants argue that the combination does not teach opposing side gussets. Appellants rely on a dictionary definition which states that a gusset is an insert and

assert that LaCroix does not provide an insert because LaCroix provides an integral part in the mold. Appellants further argue on page 17 that the mold box projections of Stuckey are not inserts, and therefore cannot be gussets. Appellants further argue on pages 17-18 that a projection, such as disclosed by Stuckey, is not necessarily a bevel and does not necessarily form a substantially constant angle of inclination in the compressed mix. Appellants further assert there is no motivation to combine Stuckey with LaCroix because one teaches splitting techniques and one teaches against splitting techniques.

Response:

Note that the triangular portions in dispute are shown in the LaCroix Patent in Fig. 7 (items 14, 14') and in Fig. 8 (items 33, 35). In Fig. 8, the triangular portions are shown to be separable parts, or inserts. Additionally, it should be noted that the instant invention does not claim any step of inserting or removing the gussets, and therefore it does not appear to be critical to the invention that the gussets are in fact inserts. The same effect is provided by integral bevels in a mold, as shown by LaCroix in Fig. 7 (items 14, 14'). Additionally, in view of the teaching of bevels in the LaCroix method, it is generally asserted that it would be obvious to make the beveled portions separable in order to allow shape variations in the mold. In response to the arguments against Stuckey, it is submitted that careful examination of Fig. 10 shows projections (30) having a bevel shape, and it would have been obvious to provide these bevels with a substantially constant angle. Stuckey appears to teach the same bevel shape in Figs. 1 and 3-6, which reads on the claimed bevel shape having a substantially constant angle of inclination. With regard to Appellants' arguments against an asserted combination of Stuckey with LaCroix,

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it is submitted that the pertinent question is not whether one is motivated to combine Stuckey with LaCroix, but whether one would have found it obvious to combine the aspects relied upon with Whissell, the base reference for all rejections under consideration. Motivation for the combination was provided and is not particularly disputed, therefore it is still believed to be valid.

Dependent Claims 9-20

Appellants submit that Knipper is not concerned with masonry units. Appellants point to page 5 of the specification for the proper interpretation of “masonry units”.

Response

A masonry unit is a unit that can be used in masonry. The Knipper article is interpreted to be suitable for use in masonry. Appellants do not argue that the references cited do not teach masonry units, but only that Knipper does not teach masonry units. However, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Dependent Claim 23

Knipper does not provide a masonry unit and the rejection is based on hindsight.

Response

A masonry unit is a unit that can be used in masonry. The Knipper article is suitable for use in masonry. Appellants do not argue that there is no reference that teaches masonry units, but only that Knipper does not teach masonry units. However, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Independent Claim 24

Appellants assert patentability of Claim 24 for similar reasons as presented above in the discussion of Claim 1. Appellants assert the proposed combination of Whissell, Batlle, LaCroix, Stuckey, and Koyama is improper.

Response:

For similar reasons as presented above in the discussion of Claim 1, Claim 24 is likewise asserted to be unpatentable. The Examiner asserts that the combination set forth in the rejection is proper for the reasons set forth previously.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Matthew J. Daniels



Conferees:

Christina Johnson



CHRISTINA JOHNSON
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